

CLAIMS

1. Module for treatment of fluids including a filter membrane or for reverse osmosis and a related support (5), characterised by the fact that such support (5) is non-deformable and permeable to the fluid, has a cylindrical side surface and has a straight section with basically undulating contour.
2. Module according to claim 1, characterised by the fact that such support (5) has a straight section with basically star-shaped contour.
- 10 3. Module according to claim 1 or 2, characterised by the fact that the support (5) consists of a stack of at least two prismatic elements (7) with equal contour and basically undulated shape.
4. Module according to the previous claim, characterised by the fact that the side surface (16) of these prismatic elements (7) is rough (fig. 3) or is characterised by knurling or ducts.
- 15 5. Module according to one or both claims 3 and 4, characterised by the fact that the prismatic elements (7) are equipped with at least a lengthwise movement hole (8) and the joining of these holes forms a fluid movement duct.
- 20 6. Module according to one or more of claims 3 to 5, characterised by the fact that these prismatic elements (7) have lengthwise holes (9) intended to accommodate guide rods for alignment and possibly for tightening.
7. Module according to one or more of claims 3 to 6, characterised by the fact that the surface of the bases of such
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prismatic elements (7) are characterised by ducts or knurling or high level roughness, intended to convey the fluid treated towards the fluid movement duct.

8. Module according to one or more of claims from 3 to 7, characterised by the fact that a screen or wires or a sheet of permeable material is placed between the bases of the contiguous prismatic elements (7).

9. Module according to one or more of claims from 3 to 8, characterised by the fact that a screen or wires or a sheet of permeable material is placed between the side surface (16) of the prismatic elements (7) and the filter or reverse osmosis membrane (6).

10. Module according to one or more of claims from 3 to 9, characterised by the fact that the bases (17) of the prismatic elements (7) are modelled with holes and opposite protuberances so that these elements, arranged one on the other, are well aligned.

11. Module according to one or more of the previous claims characterised by the fact that the aforesaid non-deformable support (105) includes a lengthwise movement hole (108) of the fluid with cylindrical side surface and star-shaped or undulating straight section.

12. Module according to one or more of the previous claims, characterised by the fact that the aforesaid non-deformable support (205) is made of porous material permeable to the fluid treated or equipped with a multitude of holes on the side surface.

AMENDED CLAIMS

[received by the International Bureau on 27 May 2005 (27.05.2005);
original claims 1-12 replaced by new claims 1-8 (2 pages)]

1. Module for treatment of fluids including a filter membrane or for reverse osmosis and a related support (5), wherein such support (5) is non-deformable and permeable to the fluid, has a cylindrical side surface and has a straight section with basically undulating or
5 star-shaped contour,

characterised by the fact that the support (5) consists of a stack of at least two prismatic elements (7) with equal contour and basically undulated shape.

10 2. Module according to the previous claim, characterised by the fact that the side surface (16) of these prismatic elements (7) is rough (fig. 3) or is characterised by knurling or ducts.

3. Module according to one or both claims 1 and 2, characterised by the fact that the prismatic elements (7) are equipped with at least
15 a lengthwise movement hole (8) and the joining of these holes forms a fluid movement duct.

4. Module according to one or more of claims 1 to 3, characterised by the fact that these prismatic elements (7) have lengthwise holes (9) intended to accommodate guide rods for
20 alignment and possibly for tightening.

5. Module according to one or more of claims 1 to 4, characterised by the fact that the surface of the bases of such prismatic elements (7) are characterised by ducts or knurling or high level roughness, intended to convey the fluid treated towards the
25 fluid movement duct.

6. Module according to one or more of claims from 1 to 5, characterised by the fact that a screen or wires or a sheet of permeable material is placed between the bases of the contiguous prismatic elements (7).

5 7. Module according to one or more of claims from 1 to 6, characterised by the fact that a screen or wires or a sheet of permeable material is placed between the side surface (16) of the prismatic elements (7) and the filter or reverse osmosis membrane (6).

10 8. Module according to one or more of claims from 1 to 7, characterised by the fact that the bases (17) of the prismatic elements (7) are modelled with holes and opposite protuberances so that these elements, arranged one on the other, are well aligned.